

Validating & controlling iCub's talking head new prototype



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with the very valuable help of many IIT people :

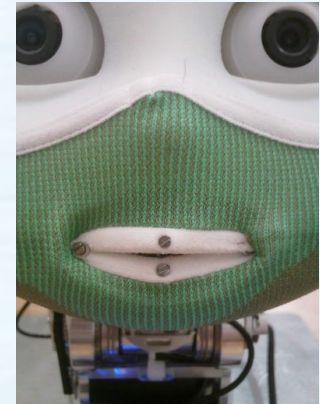
Marco Randazzo,

Alberto Parmiggiani,

Lorenzo Natale, ...

iCub's talking head prototype

- Has 5 new degrees of freedom :
 - Jaw opening
 - Lips stretching/rounding (1xL +1xR)
 - Upper lip control
 - Lower lip control
- Dressed with a tissue mask



Summer school goals

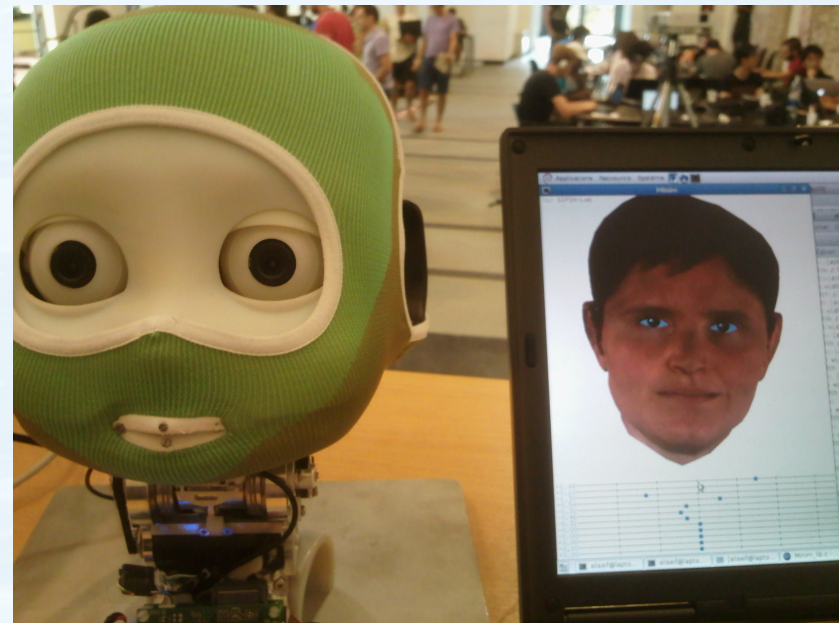
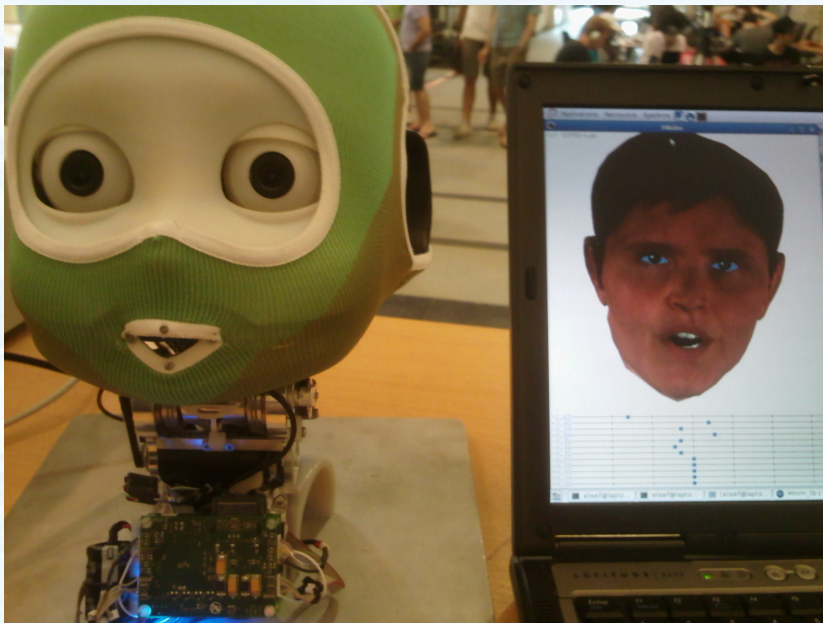
- Validate and correct the prototype :
 - Mechanic aspects (closing, shapes...)
 - Dynamics (speech rate)
 - Design aspects (aesthetics)
- Get some software demo for speech
 - Interactive articulation (keyframe control)
 - Replay motion-captured data (50 Hz)

Summer school achievements

- Design Validation :
 - Lips and jaw now closing
 - Icube will get hairs ?
 - Jaw dynamics validated

Summer school achievements

- Software demonstration :
 - Interactive articulators control



Summer school achievements

- Software demonstration :
 - Motion capture data replay (50Hz)
 - Sound launched manually
 - Using data from 3 different speakers

See Video/demo

To do list

- Validate dynamics for the other articulators
- Generate independant articulatory control
 - for upper lip
 - for lower lip
- Get audio sent synchronously
- For the community : Link to eSpeak ?